

# Developing home-based cardiac rehabilitation for people post-transient ischaemic attack (TIA) or ischaemic stroke

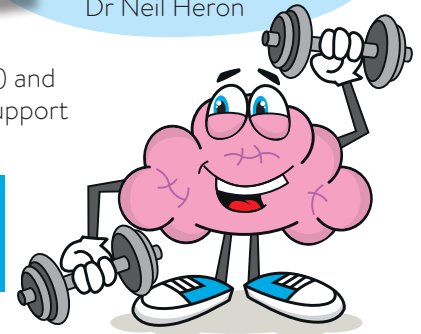
## Background

The **90 day risk** of vascular events following a TIA or 'minor' stroke can be as high as 18% (1). This is therefore a key time to initiate secondary prevention, which can be provided by an adapted cardiac rehabilitation programme, '**The Healthy Brain Rehabilitation Manual**', as shown by recent feasibility (2) and pilot studies (3) (4). The programme uses specific behaviour change techniques (5) to support the adoption of healthy lifestyles and secondary prevention (6).



Cardiac rehabilitation after a TIA or 'minor' stroke. Introducing '**The Healthy Brain Rehabilitation Manual**'  
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We aimed to develop an adapted home-based cardiac rehabilitation (CR) programme, '*The Healthy Brain Rehabilitation Manual*', for use in people with a first transient ischaemic attack (TIA) and minor ischaemic stroke



## The healthy brain rehab manual recommends

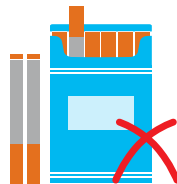
Achieving the recommended levels of **physical activity** and encouraging safe return to **sexual activity**



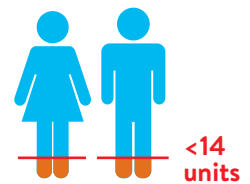
Promoting adherence to a **Mediterranean diet**



Encouraging **smoking cessation**



Safe **alcohol limits**  
Reduce alcohol intake for both males and females



Clear **communication** to patients and their families about the condition and promoting family support for the patient.



Promoting **mental health**, particularly stress management



Explaining the use of common **medications** and encouraging appropriate review to optimise their use



Promoting appropriate use of **community support**, e.g. local charities



## Conclusion:

'**The Healthy Brain Rehabilitation Manual**' has been developed following best current practice, the MRC guidelines for developing complex health service interventions (7).

**A call to action: If you are a physio, speech and language therapist, nurse, dietician, or doctor working with people with TIA/ strokes, including some of the core components of 'The Healthy Brain Rehabilitation Manual' in your interactions with these patients may help you initiate an appropriate secondary cardiovascular prevention plan, including promoting physical activity and exercise.'**

## References:

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- (2) Heron N, Kee F, Mant J et al. Stroke Prevention Rehabilitation Intervention Trial of Exercise (SPRITE) - a randomised feasibility study. *BMC Cardiovascular Disorders*. 2017; 17 (290).
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- (4) Heron N, Kee F, Cardwell C, et al. Secondary prevention lifestyle interventions initiated within 90 days after TIA or 'minor' stroke: a systematic review and meta-analysis of rehabilitation programmes. *Br J Gen Pract*. 2017 Jan;67(654):e57-e66. doi: 10.3399/bjgp16X688369
- (5) Heron N, Kee F, Donnelly M, et al. Behaviour change techniques in home-based cardiac rehabilitation: a systematic review. I. *Br J Gen Pract*. 2016;66(651):e747-57. doi:10.3399/bjgp16X686617
- (6) O'Donnell MJ, Chin SL, Rangarajan S, et al. Global and regional effects of potentially modifiable risk factors associated with acute stroke in 32 countries (INTERSTROKE): a case-control study. *Lancet*. 2016 Aug 20;388(10046):761-75. doi: 10.1016/S0140-6736(16)30506-2.
- (7) Heron N. Cardiac rehabilitation for the transient ischaemic attack (TIA) and stroke population? Using the Medical Research Council (MRC) guidelines for developing complex health service interventions to develop home-based cardiac rehabilitation for TIA and 'minor' stroke patients. *British Journal of Sports Medicine* 2019;53:839-840.